

### **REMARKS**

Applicant's counsel thanks Examiner Zimmerman for his very careful and thorough examination of the present application, and notes with appreciation the indication of allowable subject matter in claims 2-4, 6, 7, 10, and 12-17. Of these, claims 2 and 13-14 have now been rewritten in independent form and are thus in condition for allowance.

Other claims have been amended, and new claims 22-23 have been added to more clearly describe the invention. No new matter has been entered. Basis for all claim amendments and the new claims can be found in the specification and claims as filed.

Claim 1 has been rejected under 35 USC § 103(a) as being allegedly obvious over Eckberg in view of Kirsanov et al. (Kirsanov). Specifically, the Examiner notes that Eckberg "fails to teach...the suspension medium being selected from the group consisting of (a) organic materials having a vapor pressure of less than 0.1 mm Hg at 20°C, and (b) water." The Examiner has relied on Kirsanov to supply the necessary teaching. (See Office action, pp. 5-6 regarding claim 1). This claim has now been amended to recite that the suspension medium is "selected from the group consisting of organic materials having a vapor pressure of less than 0.1 mm Hg at 20°C," thereby eliminating water from the group of suspension medium materials (though it may be present as an impurity). Conversely, Kirsanov discloses only water as a suspension medium for the carbonate slurry (see Kirsanov, page 6 line 11, cited by the Examiner; see also page 2 lines 15-20 and page 5 lines 13-18). Therefore, claim 1 as now presented is believed to be allowable.

Claim 5 has been rejected under 35 USC § 102(b) as being allegedly anticipated over Kirsanov. Claim 5 has been amended similarly as claim 1 above to recite the suspension medium being "selected from the group consisting of organic materials having a vapor pressure of less than 0.1 mm Hg at 20°C." Accordingly, it is respectfully submitted that claim 5 is now also allowable for the same reasons discussed for claim 1 above.

Regarding claim 8, this claim is also rejected under 35 USC § 102(b) over Kirsanov. This claim, which has now been rewritten in independent form, recites the suspension medium "being deionized water." At page 3 of the Office action, the Examiner appears to have treated this limitation as a process limitation (i.e. as a *method step* for preparing the claimed slurry), and therefore has accorded it no patentable weight. Respectfully, this position is traversed. As written, claim 8 recites that the suspension medium is "deionized water." Deionized water **is a composition of matter** that is understood by persons of ordinary skill in the art to be substantially free of ionized species which otherwise probably would be present. That is, ionic species or impurities which are generally common in water from conventional sources have been removed. In claim 8, it is not the method of deionizing the water which is claimed; in fact, the particular method used to deionize the water is immaterial to the composition recited in claim 8. What is important is that **deionized water** is used, which has chemical properties distinguishable from, e.g., tap water. By analogy, tempered steel has physical properties which are distinguishable from mild steel, and the two are considered different materials. Therefore, though deionizing water may be a method step, deionized water is a composition of matter that is entitled to patentable weight in a product claim. For the above reasons, and because none of the references disclose a suspension medium of deionized water, it is respectfully submitted that the rejection of claim 8 has been overcome.

New claim 22 is an independent claim based on claim 1 as filed, and recites the "oxide layer being formed from an emission mix slurry [having] greater than 50 wt.% and not more than 80 wt.% carbonate powder as suspended solids." (Claim 1 recited "50-80 wt.% carbonate powder"). In the Office action, the Examiner rejected claim 1 in part on the ground that Kirsanov discloses "the oxide layer (page 6 line 1) being formed from an emission mix slurry (suspension page 6 line 4), the slurry comprising 20-50 wt.% suspension medium (page 6 line 11) and 50-80 wt.% carbonate powder (page 6 line 7; page 3 line 2) as suspended solids." Office

action, page 6. Turning to page 6 line 7 cited by the Examiner, Kirsanov teaches the "triple carbonate" being provided in an amount of 45-50 weight percent. Furthermore, at page 4 lines 9-16, Kirsanov teaches the following:

We shall now discuss what happens when the percentage level of each suspension ingredient goes beyond the upper and lower limits.

....As the concentration of the triple carbonate rises, the luminous flux stability deteriorates due to the incomplete thermal dissociation of the carbonates; they continue to decompose in the operating lamp and the carbon dioxide formed in the process serves to deactivate the luminophore.

It is clear from Kirsanov that quantities of carbonate powder greater than 50 weight percent are to be avoided due to the above-recited deleterious effects. In contrast, claim 22 explicitly recites an oxide layer formed from an emission mix slurry having "greater than 50 wt.%" carbonate powder as suspended solids. Accordingly, it is believed that new claim 22 is allowable over the cited references.


In view of the foregoing, claims 1, 5, 8 and 22 are now believed allowable over the cited references. In addition, claims 2-4, 6, 7, 10, and 12-17 have already been indicated as being allowable. All remaining claims are dependent claims and should therefore be allowable as such.

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Respectfully submitted,

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